Employment Cost Index Technical Note

The Employment Cost Index (ECI) is a quarterly index that measures the change in the cost of labor, free from the influence of employment shifts among occupations and industries. It measures that change for total compensation (wages, salaries, and employer costs for employee benefits), for wages and salaries only, and for benefit costs only.

Wages and salaries are defined as the hourly straighttime wage rate, or straight-time earnings divided by the corresponding hours. Straight-time wage and salary rates are total earnings before payroll deductions, excluding premium pay for overtime and for work on weekends and holidays, shift differentials, and nonproduction bonuses such as lump-sum payments.

Benefits covered by the ECI are: Paid leave, supplemental pay, insurance benefits, retirement and savings benefits, legally required benefits, and other benefits.

The ECI provides data for the civilian economy, which includes the private economy and the public sector—excluding farms, private households, the self-employed and the Federal Government. Data are provided separately for the public and private sectors.

Each quarter, straight-time average hourly wage and salary rates and benefit cost data are collected from a probability sample. Data are collected for the pay period including the 12th day of the survey months of March, June, September, and December. The sample establishments are classified by industry based on the 1987 *Standard Industrial Classification (SIC) Manual*, as defined by the U.S. Office of Management and Budget. Within an establishment, specific job categories are selected to represent broad occupational definitions.

Fixed employment weights are used each quarter to calculate the most aggregate indexes—civilian, private, and State and local governments. These fixed weights are also used to derive all of the industry and occupation series indexes. Since March 1995, the 1990 employment counts, primarily from the Bureau's Occupational Employment Survey, were used. From June 1986 to December 1994, employment counts from the 1980 Census were used as weights.

Prior to June 1986, employment counts from the 1970 Census were used.

For the series based on bargaining status, region, and area size, employment data are not available from the Census. The employment weights are reallocated within these series each quarter based on the current ECI sample. The indexes for these series, consequently, are not strictly comparable to those for the aggregate, industry, and occupation series. A fuller explanation of the calculation of index numbers appears in the article, "Estimation Procedures for the Employment Cost Index," *Monthly Labor Review*, May 1982.

Beginning with the release of ECI data for March 1990, indexes were rebased to June 1989=100. Beginning with the release of ECI data for December 1990, seasonally adjusted data are available for selected ECI series. A description of the rebasing is available in "Employment Cost Index Rebased to June 1989," *Monthly Labor Review*, April 1990.

The costs per hour worked of compensation components, based on March data from the ECI, are published in a separate news release titled, "Employer Costs for Employee Compensation." The cost levels, which are published annually in mid-June, are calculated with current employment weights, rather than the fixed 1990 weights.

More detailed information on the ECI is available in several sources. These include an annual bulletin, the latest of which is Employment Cost Indexes and Levels, 1975-95, (Bulletin 2466); chapter 8 of the BLS Handbook of Methods (Bulletin 2414), "The Employment Cost Index," and several articles published in the Monthly Labor Review. The annual bulletin is available from the Bureau of Labor Statistics, Publications Sales Center, P.O. Box 2145, Chicago, Illinois 60690. Reprints of the articles plus other descriptive pieces and a complete historical listing are available upon request. ECI historical data are also available on data diskettes. Information may also be obtained by writing to the ECI, Division of Compensation Data Analysis and Planning, Bureau of Labor Statistics, 2 Massachusetts Ave. NE, Room 4175, Washington, DC 20212-0001. Telephone (202) 606-6199. E-mail: ocltinfo@bls.gov Internet access: http://stats.bls.gov/ecthome.htm

Table A-1. Employment Cost Index for total compensation¹, wages and salaries, and benefit costs by industry and occupational group, selected periods, 1996-1998

(Seasonally adjusted data)

		s (June =100)			Percent c	hanges for	r 3-months	s ended—		
Industry and occupational group	Dec. 1997	Mar. 1998	June 1996	Sep. 1996	Dec. 1996	Mar. 1997	June 1997	Sep. 1997	Dec. 1997	Mar. 1998
TOTAL COMPENSATION										
Civilian workers State and local government Private industry	135.2 135.4 135.1	136.1 136.5 136.0	0.9 .6 .9	0.6 .6 .7	0.7 .7 .7	0.7 .6 .6	0.8 .5 .9	0.8 .6 .8	1.0 .6 1.0	0.7 .8 .7
Industry										
Goods producing ² Construction ³ Manufacturing	134.2 130.0 135.3	135.0 130.9 136.3	.9 .5 .9	.6 .4 .8	.7 .9 .7	.3 .6 .3	.9 .8 .8	.8 .7 .7	.4 .5 .5	.6 .7 .7
Durables Nondurables	135.8 134.6	136.5 135.8	1.1	.6 1.2	.6 .7	.2 .4	.8 .9	.7 .8	.6 .5	.5 .9
Service producing ⁴	135.5 134.2 135.3 131.7	136.5 135.5 137.8 133.4	.8 .8 1.1 1	.7 .5 .7 1.0	.7 .9 .9 1.1	.8 .4 1.4 1.1	.8 .7 .4 .7	.9 .8 .8	1.3 1.0 .5 .6	.7 1.0 1.8 1.3
Finance, insurance, and real estate ^{3,5}	134.5 138.6	136.7 139.2	1.4 .8	.3 .8	6 .6	2.1 .7	.6 .9	.9 1.0	3.1 1.2	1.6 .4
Nonmanufacturing	134.9	135.9	.9	.6	.8	.8	.8	.8	1.3	.7
Occupational group										
White collar	136.9 132.5 133.5	138.0 133.1 134.9	.8 .7 .7	.9 .4 .6	.6 .9 1.0	.8 .3 .9	.8 .8 .9	.9 .8 1.6	1.3 .7 .5	.8 .5 1.0
WAGES AND SALARIES										
Civilian workers	132.8 134.1 132.5	133.9 135.1 133.6	1.0 .8 1.0	.7 .6 .7	.7 .8 .7	.8 .6 .9	.9 .6 .9	.9 .7 1.0	1.1 .8 1.1	.8 .7 .8
Industry										
Goods producing ^{2,5} Construction ³ Manufacturing ⁵ Durables ⁵ Nondurables	130.6 125.1 132.2 131.9 132.7	132.0 126.3 133.7 133.4 134.2	1.0 .8 .9 1.1	.8 .6 .9 .9	.6 .7 .5 .5	.6 1.1 .5 .5	1.1 .9 .9 .9	.8 .8 .8 .8	.5 .6 .7 .5	1.1 1.0 1.1 1.1
Service producing ⁴ Transportation and public utilities Wholesale trade ³ Retail trade	133.3 131.2 133.6 130.6	134.3 131.9 136.5 132.0	1.0 .6 1.0	.7 .7 .6 1.0	.8 .8 .9 1.4	.9 .8 1.6 1.0	.9 .8 .2 1.0	1.1 .9 .8 .9	1.4 .8 .5 .7	.8 .5 2.2 1.1
Finance, insurance, and real estate ^{3,5}	130.6 136.2	132.6 137.1	1.8 1.0	.2 .7	.0 .6	1.9 .9	.6 1.1	.9 1.2	3.3 1.1	1.5 .7
Nonmanufacturing	132.3	133.4	1.0	.6	1.0	.9	.9	1.0	1.3	.8

See footnotes at end of table.

Table A-1. Employment Cost Index for total compensation¹, wages and salaries, and benefit costs by industry and occupational group, selected periods, 1996-1998 — Continued

(Seasonally adjusted data)

	Indexe 1989	s (June =100)			Percent c	hanges fo	r 3-months	s ended—		
Industry and occupational group	Dec. 1997	Mar. 1998	June 1996	Sep. 1996	Dec. 1996	Mar. 1997	June 1997	Sep. 1997	Dec. 1997	Mar. 1998
WAGES AND SALARIES-Continued										
Occupational group										
White collarBlue collar ⁵ Service	134.4 129.1 130.8	135.6 130.2 132.1	1.0 1.0 .8	0.9 .5 .7	0.7 .6 1.1	0.9 .7 .9	0.9 1.0 1.0	1.1 .8 1.6	1.3 .6 .7	0.9 .9 1.0
BENEFIT COSTS										
Civilian workers	141.1 138.5 141.7	141.6 139.6 142.1	.7 .5 .7	.5 .4 .6	.6 .7 .6	.3 .4 .1	.5 .3 .6	.5 .3 .5	.8 .3 .9	.4 .8 .3
Industry										
Goods producing ²	141.8 142.0	141.4 141.5	.7 .8	.3 .4	.9 .9	1 3	.6 .8	.6 .5	.2 .4	3 4
Service producing ⁴	141.7	142.5	.6	.8	.4	.4	.6	.5	1.4	.6
Nonmanufacturing	141.7	142.5	.6	.7	.5	.4	.6	.5	1.1	.6
Occupational group										
White collar	143.8 139.0 141.8	144.5 139.2 143.4	.6 .6 .4	.7 .1 1	.6 .7 .8	.4 .1 .8	.5 .4 .9	.3 .6 1.4	1.4 .2 .2	.5 .1 1.1

Includes wages, salaries, and employer costs for employee benefits.
 Includes mining, construction, and manufacturing.
 This series may be discontinued with the September 1998 news

⁴ Includes transportation, communications, and public utilities; wholesale and retail trade; finance, insurance, and real estate; and service industries.
⁵ No identifiable seasonality was found for this series.

Table A-2. Employment Cost Index for total compensation¹ for civilian and State and local government workers by industry and occupational group, selected periods, 1997-1998

	Indexes	(June 19	89=100)		F	ercent cha	anges for-	_	
Industry and occupational group			N4	3 m	onths end	ed-	12 n	nonths end	ded-
	Mar. 1997	Dec. 1997	Mar. 1998	Mar. 1997	Dec. 1997	Mar. 1998	Mar. 1997	Dec. 1997	Mar. 1998
Civilian workers	132.0	135.2	136.3	0.8	0.8	0.8	2.9	3.3	3.3
Excluding sales occupations	132.1	135.3	136.4	.7	.8	.8	2.7	3.1	3.3
Industry									
Goods producing ²	131.5	134.1	135.1	.5	.4	.7	2.5	2.4	2.7
Manufacturing	132.6	135.3	136.4	.4	.5	.8	2.6	2.4	2.9
Service producing ³	132.1	135.5	136.8	.9	1.0	1.0	3.0	3.5	3.6
Services	134.1	137.6	138.3	.7	.8	.5	2.8	3.3	3.1
Health services	135.2	137.9	138.0	.6	.9	.1	2.0	2.6	2.1
Hospitals	134.2	136.7	137.1	.3	.8	.3	1.4	2.2	2.2
Educational services	134.0	137.0	137.5	.1	.4	.4	2.7	2.3	2.6
Public administration ⁴	133.0	135.1	136.4	.9	.7	1.0	2.9	2.5	2.6
Nonmanufacturing	131.7	135.1	136.2	.9	1.0	.8	3.0	3.5	3.4
Occupational group									
White collar	133.1	136.5	137.7	.9	1.0	.9	3.1	3.5	3.5
Excluding sales	133.5	136.9	138.1	.8	1.0	.9	2.9	3.4	3.4
Professional specialty and technical	133.7	136.7	137.5	.5	.7	.6	2.4	2.7	2.8
Executive, administrative, and managerial	133.2	137.3	139.1	1.3	1.5	1.3	3.7	4.4	4.4
Administrative support, including clerical	133.6	136.9	138.0	.8	.8	.8	2.7	3.2	3.3
Blue collar	129.8	132.4	133.2	.5	.5	.6	2.4	2.6	2.6
Service	132.0	135.6	136.9	.8	.7	1.0	3.1	3.5	3.7
State and local government	133.2	135.7	136.5	.4	.5	.6	2.5	2.3	2.5
Industry									
Services	133.2	136.0	136.5	.1	.4	.4	2.5	2.2	2.5
Excluding schools ^{5,6}	132.5	135.3	136.1	.4	.7	.6	1.7	2.5	2.7
Health services	134.5	137.2	137.9	.3	.9	.5	1.5	2.3	2.5
Hospitals	134.8	137.6	138.4	.4	1.0	.6	1.7	2.5	2.7
Educational services	133.1	135.9	136.3	.1	.4	.3	2.6	2.2	2.4
Schools	133.4	136.2	136.6	.0	.4	.3	2.6	2.1	2.4
Elementary and secondary	133.1	135.8	136.1	.0	.2	.2	2.2	2.0	2.3
Colleges and universities	134.3	137.2	137.9	.2	.7	.5	3.8	2.4	2.7
Public administration ⁴	133.0	135.1	136.4	.9	.7	1.0	2.9	2.5	2.6
Occupational group									
White collar	132.9	135.5	136.1	.3	.5	.4	2.5	2.3	2.4
Professional specialty and technical	132.5	135.1	135.6	.2	.4	.4	2.6	2.1	2.3
Executive, administrative, and managerial	134.1	136.4	137.5	.9	.6	.8	2.6	2.6	2.5
Administrative support, including clerical	133.3	136.1	136.9	.2	.6	.6	2.5	2.3	2.7
Blue collar	132.1	134.2	135.0	.7	.7	.6	2.4	2.3	2.2
Service	135.6	137.8	139.4	.8	.6	1.2	2.8	2.5	2.8

Includes wages, salaries, and employer costs for employee benefits.
 Includes mining, construction, and manufacturing.

Includes transportation, communications, and public utilities; wholesale and retail trade; finance, insurance, and real estate; service industries; and public administration.

 $^{^{\}rm 4}$ Includes executive, legislative, judicial, administrative, and regulatory activities of State and local governments, SIC's 91 through 96.

⁵ Formerly called hospitals and other services.

⁶ This series may be discontinued with the September 1998 news

Table A-3. Employment Cost Index for total compensation¹ for private industry workers, by industry and occupational group, selected periods, 1997-1998

	Indexes	(June 19	89=100)		F	ercent cha	anges for-	_	
Industry and occupational group				3 m	onths end	ed-	12 n	nonths end	ded-
industry and occupational group	Mar. 1997	Dec. 1997	Mar. 1998	Mar. 1997	Dec. 1997	Mar. 1998	Mar. 1997	Dec. 1997	Mar. 1998
Private industry workers Excluding sales occupations	131.7 131.9	135.1 135.2	136.3 136.4	0.8 .8	0.9 .8	0.9 .9	3.0 2.8	3.4 3.4	3.5 3.4
Industry									
Goods producing ²	131.4	134.1	135.1	.4	.4	.7	2.5	2.4	2.8
Excluding sales	131.1	133.6	134.5	.5	.4	.7	2.4	2.4	2.6
White collar	133.5	136.2	137.7	.5	.4	1.1	2.7	2.5	3.1
Excluding sales	132.6	135.0	136.3	.4	.4	1.0	2.5	2.2	2.8
Blue collar	130.2	132.8	133.5	.5	.3	.5	2.4	2.5	2.5
Construction ³	127.2	129.7	130.6	.6	.0	.7	2.3	2.6	2.7
Manufacturing	132.6	135.3	136.4	.4	.5	.8	2.6	2.4	2.9
White collar	133.9	136.7	138.2	.2	.7	1.1	2.6	2.3	3.2
Excluding sales	132.8	135.3	136.5	.2	.6	.9	2.5	2.1	2.8
Blue collar	131.7	134.3	135.0	.5	.4	.5	2.6	2.4	2.5
Durables	133.0	135.7	136.5	.3	.5	.6	2.5	2.3	2.6
Aircraft manufacturing (SIC 3721)	137.3	136.9	137.2	1	7	.2	.3	4	1
White collar	133.5	134.3	134.7	1	2	.3	.8	.4	.9
Blue collar	142.3	139.6	139.6	.0	-1.6	.0	7	-1.9	-1.9
Nondurables	131.7	134.5	135.9	.5	.6	1.0	2.7	2.7	3.2
Service producing ⁴	131.6	135.3	136.7	1.1	1.1	1.0	3.1	3.9	3.9
Excluding sales	132.2	136.1	137.4	1.0	1.2	1.0	3.0	4.0	3.9
White collar	132.7	136.6	138.0	1.2	1.3	1.0	3.3	4.2	4.0
Excluding sales	134.0	138.1	139.5	1.1	1.3	1.0	3.1	4.1	4.1
Blue collar	128.2	130.9	132.1	.7	.7	.9	2.4	2.8	3.0
Service	129.5	133.9	135.0	.7	.9	.8	3.4	4.1	4.2
Transportation and public utilities	131.3	134.2	135.8	.7	1.0	1.2	2.7	2.9	3.4
Transportation ³	130.6	133.4	134.0	1.1	1.0	.4	2.9	3.3	2.6
Public utilities	132.0	135.1	137.9	.2	1.0	2.1	2.4	2.6	4.5
Communications	130.2	134.0	136.6	7	1.7	1.9	1.7	2.2	4.9
Electric, gas, and sanitary services	134.2	136.4	139.6	1.4	.3	2.3	3.2	3.0	4.0
Wholesale and retail trade	130.1	132.9	134.7	1.2	.4	1.4	3.7	3.3	3.5
Excluding sales	130.4	134.0	135.5	1.1	.8	1.1	3.6	3.9	3.9
Wholesale trade ³	132.9	135.1	137.7	1.5	.4	1.9	4.2	3.2	3.6
Excluding sales ³	132.6	135.4	137.0	1.3	.7	1.2	4.1	3.4	3.3
Retail trade	128.5	131.7	133.1	.9	.5	1.1	3.2	3.4	3.6
General merchandise stores ³	126.4	130.0	131.2	.1	1.1	.9	3.3	2.9	3.8
Food stores ³	128.2	129.4	131.3	2	3	1.5	3.7	.8	2.4
Finance, insurance, and real estate ³	128.6	134.5	136.7	2.1	3.1	1.6	3.3	6.7	6.3
Excluding sales ³	131.5	137.6	140.2	1.8	3.1	1.9	3.1	6.5	6.6
credit agencies ³	130.6	140.6	143.3	2.0	5.6	1.9	2.9	9.8	9.7
Insurance ³	131.9	134.8	137.4	1.8	1.3	1.9	3.4	4.0	4.2
Excluding sales ³	136.0	138.6	140.0	1.9	.9	1.0	3.0	3.8	2.9
Services	134.6	138.5	139.3	.9	1.1	.6	3.0	3.8	3.5
Business services ³	133.3	138.6	139.5	1.1	1.7	.6	3.4	5.2	4.7
Health services	135.5	138.1	138.2	.7	.8	.1	2.2	2.7	2.0
Hospitals	134.0	136.5	136.7	.2	.8	.1	1.4	2.1	2.0
Nursing homes	_	_	_	.7	.8	.8	2.8	2.6	2.7
Educational services	138.5	142.6	143.4	.4	.7	.6	3.1	3.3	3.5
Colleges and universities	139.5	143.7	144.3	.3	.8	.4	2.6	3.3	3.4

See footnotes at end of table.

Table A-3. Employment Cost Index for total compensation for private industry workers, by industry and occupational group, selected periods, 1997-1998 — Continued

	Indexes	(June 19	89=100)		F	ercent cha	anges for-	_	
Industry and occupational group	N4	D		3 m	onths end	ed-	12 n	nonths end	ded-
, , , , , , ,	Mar. 1997	Dec. 1997	Mar. 1998	Mar. 1997	Dec. 1997	Mar. 1998	Mar. 1997	Dec. 1997	Mar. 1998
Industry-Continued									
Nonmanufacturing industries	131.1	134.7	136.0	1.0	1.1	1.0	3.1	3.8	3.7
White collar	132.7	136.5	137.9	1.2	1.2	1.0	3.3	4.1	3.9
Excluding sales	134.0	137.9	139.3	1.1	1.2	1.0	3.1	4.1	4.0
Blue collar	127.5	130.1	131.0	.6	.5	.7	2.3	2.7	2.7
Service	129.4	133.8	134.9	.6	.8	.8	3.3	4.0	4.3
Occupational group									
White collar	133.1	136.7	138.1	1.1	1.1	1.0	3.2	3.8	3.8
Excluding sales	133.7	137.4	138.8	.9	1.1	1.0	2.9	3.7	3.8
Professional specialty and technical	134.6	137.8	138.8	.7	.8	.7	2.3	3.1	3.1
Executive, administrative, and managerial	133.0	137.4	139.4	1.3	1.6	1.5	3.9	4.6	4.8
Sales ³	130.1	133.5	135.3	1.6	1.0	1.3	4.2	4.2	4.0
Administrative support, including									
clerical	133.7	137.0	138.2	.9	.8	.9	2.8	3.4	3.4
Blue collar	129.6	132.3	133.1	.5	.5	.6	2.4	2.6	2.7
Precision production, craft, and repair	129.6	131.9	132.9	.4	.2	.8	2.5	2.2	2.5
Machine operators, assemblers, and									
inspectors	130.0	133.0	133.6	.4	.6	.5	2.3	2.7	2.8
Transportation and material moving	126.1	128.9	129.3	.7	.7	.3	1.8	3.0	2.5
Handlers, equipment cleaners, helpers, and									
laborers	132.8	135.8	137.0	1.1	1.2	.9	3.3	3.4	3.2
Service	129.8	134.1	135.3	.7	.8	.9	3.2	4.0	4.2
Production and nonsupervisory									
occupations ⁵	131.1	134.2	135.3	.8	.8	.8	2.8	3.2	3.2

¹ Includes wages, salaries, and employer costs for employee benefits.

NOTE: Dashes indicate data not available.

Includes wayes, sensines, and empty, and includes mining, construction, and manufacturing.
 This series may be discontinued with the September 1998 news release.

4 Includes transportation, communications, and public utilities; wholesale

and retail trade; finance, insurance, and real estate; and service industries.

This series has the same industry and occupational coverage as the Hourly Earnings Index, which was discontinued in January 1989.

Table A-4. Employment Cost Index for total compensation for private industry workers, by bargaining status, region, and area, selected periods, 1997-1998

	Indexes	(June 19	89=100)		F	ercent ch	anges for-	_	
Bargaining status, region, and area	N4	Dec.	Mar.	3 m	onths end	ed-	12 n	nonths end	ded-
	Mar. 1997			Mar. 1997	Dec. 1997	Mar. 1998	Mar. 1997	Dec. 1997	Mar. 1998
Bargaining status									
Union	131.0	133.5	134.0	0.2	0.2	0.4	1.9	2.1	2.3
	128.9	131.6	131.8	.0	.3	.2	1.7	2.1	2.2
Goods-producing industries ²	130.0	132.5	132.7	.2	.2	.2	1.6	2.1	2.1
	131.9	134.5	135.3	.2	.4	.6	2.2	2.1	2.6
Manufacturing	130.8	133.3	133.6	.2	.2	.2	1.6	2.1	2.1
	130.5	133.0	133.1	.3	.3	.1	1.7	2.2	2.0
	130.6	133.2	133.9	.2	.2	.5	2.0	2.1	2.5
Nonunion	131.8	135.3	136.7	1.1	1.0	1.0	3.2	3.8	3.7
	129.9	132.6	133.8	.8	.6	.9	2.9	2.9	3.0
Goods-producing industries ²	132.0	134.7	135.9	.5	.5	.9	2.9	2.6	3.0
Service-producing industries ³	131.5	135.3	136.7	1.2	1.2	1.0	3.3	4.2	4.0
Manufacturing	133.1	135.9	137.2	.5	.6	1.0	2.9	2.6	3.1
	132.2	134.8	136.0	.6	.4	.9	3.2	2.6	2.9
	131.1	134.9	136.3	1.2	1.1	1.0	3.2	4.1	4.0
Region ⁴									
Northeast South Midwest West	132.2	135.0	136.0	.8	.7	.7	2.6	3.0	2.9
	130.8	134.6	135.5	.8	1.6	.7	3.0	3.8	3.6
	133.3	136.9	138.3	.9	.5	1.0	2.9	3.6	3.8
	130.3	133.4	135.2	1.1	.7	1.3	3.5	3.5	3.8
Area									
Metropolitan Other	131.7	135.1	136.4	.8	.9	1.0	2.9	3.4	3.6
	131.4	135.3	135.9	.9	1.1	.4	3.3	3.9	3.4

¹ Includes wages, salaries, and employer costs for employee benefits.

Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia; Midwest—Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin; and West-Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming.

NOTE: The indexes for these series are not strictly comparable to those for the aggregate, occupation, and industry series.

² Includes mining, construction, and manufacturing.

³ Includes transportation, communications, and public utilities; wholesale and retail trade; finance, insurance, and real estate; and service

industries.

4 The regional coverage is as follows: Northeast—Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont; South—Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland,

Table A-5. Employment Cost Index for wages and salaries for civilian and State and local government workers, by industry and occupational group, selected periods, 1997-1998

	Indexes	(June 19	89=100)		F	ercent cha	anges for-	_	
Industry and occupational group		D	N4	3 m	onths end	ed-	12 n	nonths end	ded-
	Mar. 1997	Dec. 1997	Mar. 1998	Mar. 1997	Dec. 1997	Mar. 1998	Mar. 1997	Dec. 1997	Mar. 1998
Civilian workers	129.2 129.2	132.8 132.8	134.0 134.0	0.9 .9	0.9 .8	0.9 .9	3.3 3.1	3.8 3.7	3.7 3.7
Industry									
Goods producing¹	127.6 129.1 129.8 132.0 132.4 131.0 132.5 128.9 129.1 130.6 131.0 131.4 131.0 130.4 126.2 128.6	130.6 132.2 133.6 136.0 135.4 133.6 135.9 131.4 132.8 134.3 134.8 135.0 135.6 133.7 129.3 132.6	132.0 133.7 134.8 136.9 136.2 134.2 136.3 132.7 134.0 135.6 136.1 135.8 137.4 135.0 130.4 133.7	.6 .5 1.0 .7 .8 .4 .2 .9 1.0	.5 .7 1.1 .9 .8 .8 .4 .8 1.0	1.1 1.1 .9 .7 .6 .4 .3 1.0 .9	3.0 3.0 3.3 3.1 2.4 1.9 2.9 3.2 3.3 3.4 3.1 2.7 3.8 3.2 2.8 3.5	3.0 3.0 4.0 3.7 3.0 2.4 2.7 2.9 3.9 3.8 3.8 3.8 3.3 4.8 3.6 3.1 3.9	3.4 3.6 3.9 3.7 2.9 2.4 2.9 2.9 3.8 3.8 3.9 3.3 4.9 3.5 3.3 4.0
State and local government	131.4	134.4	135.1	.4	.6	.5	2.8	2.7	2.8
Industry									
Services Excluding schools ^{4,5} Health services Hospitals Educational services Schools Elementary and secondary Colleges and universities Public administration ³	132.1 131.2 132.1 131.9 132.1 132.2 132.4 131.5 128.9	135.3 134.4 135.3 135.2 135.3 135.5 135.7 134.6 131.4	135.7 135.4 136.3 136.3 135.7 135.8 136.0 135.2 132.7	.2 .5 .5 .5 .1 .0 .0	.4 .8 1.0 1.1 .4 .4 .3 .7	.3 .7 .7 .8 .3 .2 .2 .2 .4	2.7 2.3 2.2 2.2 2.8 2.7 2.4 3.7 3.2	2.6 3.0 3.0 3.0 2.5 2.5 2.5 2.6 2.9	2.7 3.2 3.2 3.3 2.7 2.7 2.7 2.8 2.9
Occupational group									
White collar	131.4 131.9 131.3 129.2 129.6 132.4	134.5 135.1 134.1 132.3 132.3 135.2	135.0 135.5 135.1 133.0 133.1 136.5	.2 .2 .8 .2 .6 1.1	.6 .5 .8 .7 .8	.4 .3 .7 .5 .6 1.0	2.7 2.8 2.8 2.7 2.4 3.4	2.6 2.6 3.0 2.6 2.7 3.2	2.7 2.7 2.9 2.9 2.7 3.1

activities of State and local governments, SIC's 91 through 96.

Includes mining, construction, and manufacturing.
 Includes transportation, communications, and public utilities; wholesale and retail trade; finance, insurance, and real estate; service industries; and public administration.

³ Includes executive, legislative, judicial, administrative, and regulatory

⁴ Formerly called hospitals and other services.
5 This series may be discontinued with the September 1998 news release.

Table A-6. Employment Cost Index for wages and salaries for private industry workers by industry and occupational group, selected periods, 1997-1998

	Indexes	(June 19	89=100)		P	ercent cha	anges for-	_	
Industry and accumpational group				3 m	onths end	ed-	12 m	nonths end	ded-
Industry and occupational group	Mar. 1997	Dec. 1997	Mar. 1998	Mar. 1997	Dec. 1997	Mar. 1998	Mar. 1997	Dec. 1997	Mar. 1998
Private industry workers	128.6 128.6	132.3 132.4	133.7 133.7	1.0 .9	1.0 .9	1.1 1.0	3.4 3.1	3.9 3.8	4.0 4.0
Industry									
Goods producing ¹ Excluding sales White collar Excluding sales Blue collar	127.5 127.0 130.0 128.9 126.0	130.6 130.0 132.9 131.6 129.2	132.0 131.3 135.0 133.3 130.1	.6 .6 .7 .6	.5 .5 .5 .5	1.1 1.0 1.6 1.3	2.9 2.8 3.0 2.9 2.9	3.0 2.9 2.9 2.7 3.1	3.5 3.4 3.8 3.4 3.3
Construction ²	122.0	124.9	126.0	1.0	.2	.9	3.1	3.4	3.3
Manufacturing	129.1 130.6 129.3 128.0 129.0 132.0 127.8 137.7 129.3	132.2 133.6 132.2 131.2 131.9 134.0 129.8 139.6 132.6	133.7 135.6 133.8 132.3 133.4 135.1 131.2 140.1 134.2	.5 .4 .3 .5 .5 .8 1.0 .4	.7 .6 .7 .8 .5 .5 .4 .9	1.1 1.5 1.2 .8 1.1 .8 1.1 .4	3.0 2.8 2.6 3.1 3.1 2.3 3.0 1.2 2.8	3.0 2.7 2.6 3.1 2.7 2.4 2.6 1.8 3.2	3.6 3.8 3.5 3.4 3.4 2.3 2.7 1.7 3.8
Service producing ³ Excluding sales White collar Excluding sales Blue collar Service	129.0 129.7 130.1 131.5 126.0 126.5	133.1 133.9 134.3 135.9 128.9 131.0	134.4 135.2 135.7 137.3 130.2 132.1	1.2 1.1 1.2 1.2 1.0	1.2 1.2 1.3 1.3 .8	1.0 1.0 1.0 1.0 1.0	3.4 3.3 3.6 3.4 2.7 3.7	4.4 4.4 4.5 4.6 3.3 4.3	4.2 4.2 4.3 4.4 3.3 4.4
Transportation and public utilities	128.2 126.5 130.1 129.8 130.4	131.3 129.5 133.5 134.0 132.9	132.1 130.1 134.5 134.4 134.7	.9 1.4 .2 4 1.1	.9 .8 1.1 1.7 .5	.6 .5 .7 .3	2.9 2.9 2.8 2.9 2.7	3.4 3.8 2.9 2.8 3.0	3.0 2.8 3.4 3.5 3.3
Wholesale and retail trade Excluding sales Wholesale trade ² Excluding sales ² Retail trade General merchandise stores ² Food stores ²	128.5 129.3 131.4 131.8 127.1 125.0 124.8	131.6 133.2 133.6 135.0 130.6 128.4 127.0	133.3 134.7 136.2 136.5 131.9 129.4 129.0	1.2 1.3 1.4 1.5 1.0 .2	.5 .8 .5 .8 .5 1.3	1.3 1.1 1.9 1.1 1.0 .8 1.6	3.7 3.9 4.2 4.4 3.5 3.3 3.6	3.6 4.3 3.1 4.0 3.8 3.0 1.8	3.7 4.2 3.7 3.6 3.8 3.5 3.4
Finance, insurance, and real estate ² Excluding sales ²	124.5 127.2	130.6 133.6	132.6 135.9	1.9 1.5	3.3 3.3	1.5 1.7	3.9 3.1	6.9 6.6	6.5 6.8
Banking, savings and loan, and other credit agencies ²	125.9 127.9 131.6	138.3 130.2 133.7	140.9 133.1 134.7	1.7 1.5 1.5	7.3 1.2 .6	1.9 2.2 .7	2.6 3.5 2.8	11.7 3.3 3.1	11.9 4.1 2.4
Services Business services ² Health services Hospitals Nursing homes Educational services Colleges and universities	131.8 131.4 132.5 130.7 - 134.5 134.6	136.2 137.3 135.4 133.2 - 138.4 138.7	137.2 137.6 136.2 133.6 - 139.1 139.1	1.0 1.0 .8 .3 1.1 .5	1.1 1.8 .8 .8 .8 .4 .7	.7 .2 .6 .3 1.3 .5	3.3 3.5 2.5 1.7 3.1 3.4 3.1	4.4 5.5 3.0 2.2 3.1 3.4 3.7	4.1 4.7 2.8 2.2 3.3 3.4 3.3

See footnotes at end of table.

Table A-6. Employment Cost Index for wages and salaries for private industry workers by industry and occupational group, selected periods, 1997-1998 — Continued

	Indexes	(June 19	89=100)		F	Percent cha	anges for-	_	
Industry and occupational group	N4	D		3 m	onths end	ed-	12 n	nonths end	ded-
,	Mar. 1997	Dec. 1997	Mar. 1998	Mar. 1997	Dec. 1997	Mar. 1998	Mar. 1997	Dec. 1997	Mar. 1998
ndustry-Continued									
Nonmanufacturing industries	128.2	132.1	133.4	1.1	1.1	1.0	3.5	4.2	4.1
White collar	129.9	134.1	135.5	1.2	1.3	1.0	3.6	4.5	4.3
Excluding sales	131.2	135.5	136.9	1.2	1.3	1.0	3.4	4.6	4.3
Blue collar	124.1	127.1	128.2	.8	.6	.9	2.6	3.2	3.3
Service	126.4	130.9	132.0	.7	.9	.8	3.6	4.3	4.4
Occupational group									
White collar	130.2	134.2	135.7	1.2	1.1	1.1	3.5	4.3	4.2
Excluding sales	130.8	134.8	136.3	1.1	1.0	1.1	3.2	4.2	4.2
Professional specialty and technical	131.0	134.8	135.9	.8	.8	.8	2.5	3.8	3.7
Executive, administrative, and managerial	131.0	135.8	137.8	1.3	1.6	1.5	4.1	5.0	5.2
Sales ²	127.8	131.4	133.1	1.5	1.2	1.3	4.8	4.4	4.1
Administrative support, including	121.0		100.1	1.0		1.0	1.0		
clerical	130.6	133.9	135.3	1.1	.8	1.0	3.2	3.6	3.6
Blue collar	126.0	129.1	130.2	.7	.6	.9	2.9	3.2	3.3
Precision production, craft, and repair	125.8	128.7	129.8	.6	.4	.9	2.8	2.9	3.2
Machine operators, assemblers, and									
inspectors	127.2	130.6	131.6	.6	.8	.8	3.1	3.3	3.5
Transportation and material moving	122.3	125.1	125.9	1.0	.8	.6	1.9	3.3	2.9
Handlers, equipment cleaners, helpers, and									
laborers	128.4	131.8	133.2	1.0	1.2	1.1	3.4	3.7	3.7
Service	126.6	131.1	132.1	.7	.9	.8	3.6	4.3	4.3
Production and nonsupervisory									
occupations ⁴	127.7	131.2	132.3	.9	.8	.8	3.2	3.7	3.6

¹ Includes mining, construction, and manufacturing.

NOTE: Dashes indicate data not available.

² This series may be discontinued with the September 1998 news

release.

3 Includes transportation, communications, and public utilities; wholesale and retail trade; finance, insurance, and real estate; and service industries.

⁴ This series has the same industry and occupational coverage as the Hourly Earnings Index, which was discontinued in January 1989.

Table A-7. Employment Cost Index for wages and salaries for private industry workers by bargaining status, region, and area, selected periods, 1997-1998

	Indexes	(June 19	89=100)		Р	ercent cha	anges for-	_	
Bargaining status, region, and area				3 m	onths end	ed-	12 n	nonths end	ded-
	Mar.	Dec.	Mar.	Mar.	Dec.	Mar.	Mar.	Dec.	Mar.
	1997	1997	1998	1997	1997	1998	1997	1997	1998
Bargaining status									
Union	126.0	128.9	129.6	0.5	0.5	0.5	2.6	2.8	2.9
	123.6	126.7	127.2	.2	.6	.4	2.2	2.7	2.9
Goods-producing industries ¹	124.1	127.1	127.9	.4	.4	.6	2.3	2.8	3.1
Service-producing industries ²	128.2	131.2	131.8	.5	.6	.5	2.7	2.8	2.8
Manufacturing	125.6	128.6	129.6	.3	.6	.8	2.2	2.7	3.2
	125.4	128.4	129.0	.3	.6	.5	2.5	2.7	2.9
	126.1	129.1	129.6	.5	.4	.4	2.7	2.9	2.8
Nonunion	129.1	133.0	134.5	1.1	1.1	1.1	3.4	4.2	4.2
	127.5	130.6	132.0	1.0	.7	1.1	3.2	3.4	3.5
Goods-producing industries ¹	128.9	132.0	133.6	.7	.6	1.2	3.2	3.1	3.6
Service-producing industries ²	129.1	133.2	134.6	1.3	1.2	1.1	3.6	4.5	4.3
Manufacturing Blue-collar occupations Nonmanufacturing	130.3	133.5	135.1	.5	.7	1.2	3.2	3.0	3.7
	129.8	133.0	134.4	.8	.8	1.1	3.5	3.3	3.5
	128.5	132.6	134.0	1.2	1.1	1.1	3.5	4.4	4.3
Region ³									
Northeast South Midwest West	128.8	131.6	132.6	.9	.7	.8	3.1	3.1	3.0
	128.5	133.0	134.0	1.2	1.8	.8	3.5	4.7	4.3
	129.0	133.0	134.7	1.0	.6	1.3	3.1	4.2	4.4
	127.7	131.2	132.9	.9	.8	1.3	3.6	3.7	4.1
Area									
MetropolitanOther	128.7	132.3	133.8	1.0	.9	1.1	3.3	3.8	4.0
	127.7	132.0	132.5	.9	1.2	.4	3.5	4.3	3.8

¹ Includes mining, construction, and manufacturing.

Texas, Virginia, and West Virginia; Midwest—Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin; and West—Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming.

NOTE: The indexes for these series are not strictly comparable to those for the aggregate, occupation, and industry series.

² Includes transportation, communications, and public utilities; wholesale and retail trade; finance, insurance, and real estate; and service industries.

industries.

³ The regional coverage is as follows: Northeast—Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont; South—Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee,

Table A-8. Employment Cost Index for benefits for civilian, State and local government, and private industry workers by industry, occupational group, and bargaining status, selected periods, 1997-1998

	Indexes	(June 19	89=100)		P	ercent ch	anges for-	_	
Industry, occupational group, and	N4	D		3 m	onths end	ed-	12 m	nonths end	ded-
bargaining status	Mar. 1997	Dec. 1997	Mar. 1998	Mar. 1997	Dec. 1997	Mar. 1998	Mar. 1997	Dec. 1997	Mar. 1998
Civilian workers	138.9	141.1	142.0	0.5	0.6	0.6	2.0	2.1	2.2
State and local government	137.4	138.6	139.7	.4	.3	.8	2.0	1.3	1.7
Private industry	139.4	141.8	142.6	.6	.7	.6	2.0	2.3	2.3
Industry									
Goods producing ¹	139.9	141.5	141.5	.1	.0	.0	1.6	1.3	1.1
Service producing ²	138.5	141.4	142.7	.8	1.1	.9	2.2	2.9	3.0
Manufacturing	139.9	141.7	141.7	.1	.2	.0	1.7	1.4	1.3
Aircraft manufacturing (SIC 3721)	148.6	143.0	141.7	-2.0	-3.1	9	-3.6	-5.7	-4.6
White collar ³	146.8	144.8	142.9	-2.7	-1.4	-1.3	-3.4	-4.0	-2.7
Blue collar	150.9	139.6	139.0	9	-5.8	4	-3.7	-8.3	-7.9
Nonmanufacturing	138.9	141.5	142.7	.7	.9	.8	2.1	2.6	2.7
Occupational group									
White collar	140.8	143.4	144.7	.8	1.0	.9	2.3	2.6	2.8
Blue collar	137.2	139.0	139.1	.1	.1	.1	1.5	1.5	1.4
Service ³	138.3	142.0	143.3	.7	.4	.9	1.9	3.3	3.6
Bargaining status									
Union	140.2	142.0	142.1	4	1	.1	.8	.9	1.4
Nonunion	138.9	141.5	142.5	.8	.9	.7	2.3	2.7	2.6

¹ Includes mining, construction, and manufacturing.
² Includes transportation, communications, and public utilities; wholesale and retail trade; finance, insurance, and real estate; and service

industries. 3 This series may be discontinued with the September 1998 news release.

Table A-9. Employment Cost Index seasonal factors for total compensation, wages and salaries, and benefit costs by industry and occupational group, 1998

Industry and occupational group	March	June	September	December
TOTAL COMPENSATION				
Industry				
Goods producing Construction	99.799	100.160	100.243	99.804
Manufacturing	00.007	400.050	400.040	00.000
Durables	99.987 100.063	100.052 100.119	100.012 99.882	99.962 99.947
1011001000	100.000	100.110	00.002	00.017
Service producing Transportation and public utilities	100.204	99.841	99.963	100.013
Wholesale trade	99.925	100.224	100.010	99.842
Retail trade	99.788	100.015	100.188	100.017
Services	100.057	99.984	100.016	99.950
Nonmanufacturing industries	100.076	100.022	100.055	99.848
Occupational group				
White collar	100.086	100.041	100.025	99.850
Blue collar	99.987	100.120	100.055	99.845
WAGES AND SALARIES				
State and local government	99.964	99.453	100.354	100.238
Industry				
Goods producing				
Construction	99.791	100.137	100.236	99.836
Nondurables	100.015	100.135	99.919	99.937
Service producing	100.092	100.017	100.016	99.868
Transportation and public utilities	100.150	99.865	99.951	100.039
Wholesale trade	99.764	100.254	99.979	100.001
Retail trade	99.887	100.028	100.121	99.966
Services	100.073	99.927	100.021	99.988
Nonmanufacturing industries	100.010	100.018	100.115	99.853
Occupational group				
White collar	100.059	100.033	100.029	99.875
Service	100.003	99.805	100.001	100.208
	L	l	l	I

See footnote at end of table.

Table A-9. Employment Cost Index seasonal factors for total compensation, wages and salaries, and benefit costs by industry and occupational group, 1998 — Continued

Industry and occupational group	March	June	September	December
BENEFIT COSTS				
State and local government	100.041	99.807	100.094	100.053
Industry				
Goods producing	100.099 100.142	100.143 100.160	99.986 99.925	99.799 99.791
Service producing	100.139	100.048	100.033	99.795
Nonmanufacturing industries	100.128	100.034	100.006	99.852
Occupational group				
White collar	100.106 99.938 99.902	100.054 100.071 100.029	100.141 100.049 99.961	99.723 99.967 100.127

NOTE: The factors shown in this table are for seasonal adjustments that are made directly to Employment Cost Index components. Seasonal factors for selected higher level indexes are not shown because they are implicit factors derived from lower level components. Also not shown are factors for components with no identifiable or stable seasonality.